

Performance Statistics for SDSS Observing Operations

Updated 04/18/03

Dark Time

Category	Baseline	2001					2002											
		Aug-01	Sep-01	Oct-01	Nov-01	Dec-01	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02
Total Time		101:23	116:11	98:22	148:47	157:20	161:21	152:40	144:02	123:40	100:11	92:34	61:12	Summer Shutdown	104:35	88:26	131:32	142:56
Imaging fraction	0.24	0.21	0.43	0.13	0.44	0.38	0.31	0.13	0.24	0.02	0.22	0.15	0.00		0.12	0.60	0.34	0.26
Spectro fraction	0.66	0.73	0.48	0.81	0.51	0.56	0.58	0.76	0.64	0.93	0.74	0.76	0.97		0.78	0.34	0.55	0.65
Weather	0.50	0.31	0.53	0.88	0.50	0.52	0.55	0.46	0.44	0.64	0.53	0.52	0.37		0.40	0.47	0.58	0.34
System uptime	0.90	0.89	0.98	0.93	0.89	0.92	0.93	0.99	0.95	0.99	0.90	0.98	0.96		0.98	1.00	0.98	0.98
Imaging efficiency	0.86	0.62	0.67	0.63	0.82	0.83	0.84	0.74	0.87	0.68	0.83	0.84			0.88	0.90	0.90	0.85
Spectro efficiency	0.65	0.60	0.59	0.57	0.60	0.66	0.60	0.66	0.58	0.63	0.63	0.58	0.65		0.67	0.56	0.64	0.66
Operations efficiency	0.90	0.93	0.93	0.96	0.96	0.94	0.93	0.93	0.89	0.95	0.97	0.92	0.97		0.96	0.94	0.97	0.97
Hours lost to problems		10:50	2:22	6:51	16:36	12:40	11:10	2:02	6:51	1:22	9:47	1:54	2:40		1:37	0:00	2:10	2:49
Hours lost to weather		68:33	55:05	12:12	73:14	73:58	69:41	83:03	78:12	43:55	42:04	44:21	38:28		63:05	46:33	55:40	94:54

Dark + Gray Time

Category	Baseline	2001					2002											
		Aug-01	Sep-01	Oct-01	Nov-01	Dec-01	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02
Total Time		141:18	161:17	130:34	214:11	221:09	228:48	205:59	191:34	157:59	136:45	121:17	70:56	Summer Shutdown	136:37	116:34	177:35	197:49
Imaging fraction	0.24	0.17	0.31	0.12	0.34	0.31	0.28	0.12	0.20	0.02	0.16	0.12	0.00		0.09	0.56	0.27	0.17
Spectro fraction	0.66	0.70	0.59	0.84	0.64	0.64	0.65	0.78	0.70	0.93	0.78	0.81	0.97		0.82	0.42	0.65	0.77
Weather	0.50	0.30	0.59	0.82	0.49	0.49	0.47	0.42	0.47	0.57	0.59	0.57	0.35		0.40	0.41	0.59	0.44
System uptime	0.90	0.90	0.98	0.94	0.89	0.92	0.95	0.99	0.92	0.99	0.93	0.97	0.96		0.99	1.00	0.99	0.98
Imaging efficiency	0.86	0.62	0.67	0.63	0.82	0.83	0.84	0.74	0.87	0.68	0.83	0.84			0.88	0.90	0.90	0.85
Spectro efficiency	0.65	0.61	0.63	0.61	0.60	0.67	0.61	0.64	0.61	0.65	0.64	0.65	0.65		0.65	0.63	0.63	0.6
Operations efficiency	0.90	0.94	0.94	0.96	0.96	0.93	0.92	0.92	0.90	0.95	0.95	0.92	0.97		0.96	0.94	0.96	0.95
Hours lost to problems		13:29	3:08	7:34	22:30	16:59	12:00	2:21	15:24	1:55	9:55	4:11	2:40		1:43	0:00	2:21	4:16
Hours lost to weather		97:18	66:24	24:03	106:58	111:06	117:24	118:58	92:42	67:34	50:57	51:08	45:47		82:05	68:14	72:57	110:29

Median Time for Spectroscopic Observing Activities

Category*	Baseline	2001					2002											
		Aug-01	Sep-01	Oct-01	Nov-01	Dec-01	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02
Cartridge change	10	7	7	6	6	6	6	5	5	5	5	5	5	Summer Shutdown	5	5	5	5
Setup	10	14	14	14	15	13	12	10	12	8	10	13	14		11	14	15	15
Calibration	5	12	12	12	12	12	14	12	15	12	12	12	14		14	14	13	13
CCD readout (assumed)	0	3	3	3	3	3	3	3	3	3	3	3	3		3	3	3	3
Total overhead	25	36	36	35	36	34	35	30	35	28	30	33	36		33	36	36	36
Science exposure (assumed)	45	45	45	45	45	45	45	45	45	45	45	45	45		45	45	45	45
Total time per plate	70	81	81	80	81	79	80	75	80	73	75	78	81		78	81	81	81
Spectroscopic Efficiency	0.64	0.56	0.56	0.56	0.56	0.57	0.56	0.60	0.56	0.62	0.60	0.58	0.56		0.58	0.56	0.56	0.56

*Time shown in minutes

Performance Statistics for SDSS

Updated 04/18/03

Dark Time

Category	Baseline	2003											
		Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03
Total Time		137:48	140:14	140:15	126:35								
Imaging fraction	0.24	0.07	0.32	0.44	0.43								
Spectro fraction	0.66	0.77	0.60	0.52	0.54								
Weather	0.50	0.64	0.63	0.29	0.58								
System uptime	0.90	0.98	0.91	0.99	1.00								
Imaging efficiency	0.86	0.84	0.80	0.84	0.90								
Spectro efficiency	0.65	0.63	0.61	0.57	0.60								
Operations efficiency	0.90	0.96	0.96	0.96	0.96								
Hours lost to problems		2:59	13:10	2:06	0:10								
Hours lost to weather		49:49	51:14	98:54	52:50								

Dark + Gray Time

Category	Baseline	2003											
		Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03
Total Time		176:19	179:39	185:43	166:59								
Imaging fraction	0.24	0.08	0.37	0.33	0.38								
Spectro fraction	0.66	0.79	0.61	0.64	0.61								
Weather	0.50	0.58	0.57	0.32	0.55								
System uptime	0.90	0.98	0.87	0.96	0.99								
Imaging efficiency	0.86	0.84	0.80	0.84	0.90								
Spectro efficiency	0.65	0.63	0.64	0.58	0.59								
Operations efficiency	0.90	0.95	0.96	0.95	0.96								
Hours lost to problems		2:59	23:58	3:53	1:24								
Hours lost to weather		73:59	72:46	125:45	75:00								

Median Time for Spectroscopic Observations

Category*	Baseline	2003											
		Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03
Cartridge change	10	5	5	4	5								
Setup	10	13	11	15	14								
Calibration	5	13	13	18	13								
CCD readout (assumed)	0	3	3	3	3								
Total overhead	25	34	32	40	35	0	0	0		0	0	0	0
Science exposure (assumed)	45	45	45	45	45					0	0	0	0
Total time per plate	70	79	77	85	80	0	0	0		0	0	0	0
Spectroscopic Efficiency	0.64	0.57	0.58	0.53	0.56								

*Time shown in minutes